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RAW SEQUENCE LISTING DATE: 09/21/2001 PATENT APPLICATION: US/09/945,265 TIME: 20:49:59

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\09212001\1945265.raw

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3 <110> APPLICANT: Springer, Timothy A.
                                                                     ENTERED
             Shimaoka, Motomu
             Lu, Chafen
     7 <120> TITLE OF INVENTION: MODIFIED POLYPEPTIDES STABILIZED IN A
             DESIRED CONFORMATION AND METHODS FOR PRODUCING SAME
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C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/945,265
C--> 12 <141> CURRENT FILING DATE: 2001-08-31
    12 <150> PRIOR APPLICATION NUMBER: US 60/229,700
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     17 <170> SOFTWARE: FastSEQ for Windows Version 4.0
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     21 <212> TYPE: DNA
     22 <213> ORGANISM: Homo sapiens
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Input Set : A:\Seqlist.txt

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Output Set: N: (CM 3 (0) ==
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120 Phe Phe Phe Phe Ala Pro Ala Ser Sei 191 ASI 200 Ala 30
25 25 25 25 25 27 Arg
121 Pho Gor Pro Pro Arg Ala Gly Arg His Phe Gly Tyl Arg
121 20 25 121 20 Ala Gly Arg His Phe Gly Tyr Arg 122 Ala Arg Ser Phe Ser Pro Pro Arg Ala Gly Arg His Phe Gly Tyr Arg
123 35 40 123 35 124 Val Leu Gln Val Gly Asn Gly Val Ile Val Gly Ala Pro Gly Glu Gly
124 Val Leu Gln Val Gly Asn Gly Val Tie Val Gly Go
55 50 The Cly His CVS
125 50 55 126 Asn Ser Thr Gly Ser Leu Tyr Gln Cys Gln Ser Gly Thr Gly His Cys 126 Asn Ser Thr Gly Ser Leu Tyr Gln Cys Gln Ser Gly Thr Gly His Cys
126 Ash Sel III 317 55 75
127 65 Arg Cly Ser Asn Tyr Thr Ser Lys Tyr Leu Gly
127 65 70 75 127 65 70 128 Leu Pro Val Thr Leu Arg Gly Ser Asn Tyr Thr Ser Lys Tyr Leu Gly 95 90 95
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100 105 100 105 100 105 100 100 100 100
131 100 105 131 2 Pro Gly Leu Ser Arg Thr Cys Asp Gln Asn Thr Tyr Leu Ser Gly Leu 132 Pro Gly Leu Ser Arg Thr Cys Asp Gln Asn Thr Tyr Leu Ser Gly Leu
132 Pro GIV Leu Sel Alg 1120
133 115 120 133 115 120 134 Cys Tyr Leu Phe Arg Gln Asn Leu Gln Gly Pro Met Leu Gln Gly Arg
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160 Pro Cly Phe Gin Glu Cys Ile Lys Gly Asn Val Asp Bed Val
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137 145 150 150 173 145 138 Phe Asp Gly Ser Met Ser Leu Gln Pro Asp Glu Phe Gln Lys Ile Leu 175 170 175
138 Phe Asp Gly Ser Met Ser Lea Sin 170 175
139 165 170 139 140 Asp Phe Met Lys Asp Val Met Lys Lys Leu Ser Asn Thr Ser Tyr Gln 140 Asp Phe Met Lys Asp Val Met Lys Lys Leu Ser Asn Thr Ser Tyr Gln 185 190
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180 185 180 185 180 180 185 180 180 180 180 180 180 180 180 180 180
185 141 180 185 142 Phe Ala Ala Val Gln Phe Ser Thr Ser Tyr Lys Thr Glu Phe Asp Phe 200 205
142 Phe Ala Ala val Gill The 300 205
143 195 Pro Asp Ala Leu Leu Lys His Val
143 195 200 144 Ser Asp Tyr Val Lys Arg Lys Asp Pro Asp Ala Leu Leu Lys His Val 215 220
215 215 Asp Tyr Val
145 210 215 146 Lys His Met Leu Leu Thr Asn Thr Phe Gly Ala Ile Asn Tyr Val 240 230 235 240
146 Lys His Met hed hed 230 235 237
147 225 Arg Clu Gly Leu Gly Ala Arg Pro Asp Ala Thr
147 225 230 235 148 Ala Thr Glu Val Phe Arg Glu Glu Leu Gly Ala Arg Pro Asp Ala Thr 250 255
149 245 Clu Ala Thr Asp Ser Gly Asn
149 245 250 149 150 Lys Val Leu Ile Ile Thr Asp Gly Glu Ala Thr Asp Ser Gly Asn 265 270
150 Lys val dec 260 265 270 Cly Lys
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260 265 151 260 265 152 Ile Asp Ala Ala Lys Asp Ile Ile Arg Tyr Ile Ile Gly Ile Gly Lys 152 Ile Asp Ala Ala Lys Asp Ile Ile Arg Tyr Ile Ile Gly Ile Gly Lys 285
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157 305 Leu Phe Thr Glu Leu Gln Lys Lys 11e 191 (dl 23)
325 330 Ser Ser Ser
156 Lys ASP 2325 159 160 Thr Ser Lys Gln Asp Leu Thr Ser Phe Asn Met Glu Leu Ser Ser 350 345 345
160 Thr Ser Lys Gin her 345
161 Sep Leu Ser Arg Gly His Ala Val Gly Ala Val
160 THE SET 270 345 161 340 162 Gly Ile Ser Ala Asp Leu Ser Arg Gly His Ala Val Val Gly Ala Val 162 Gly Ile Ser Ala Asp Leu Ser Arg Gly His Ala Val Val Gly Ala Val 360
163 355 The Cly Cly Phe Leu Asp Leu Lys Ala Asp Leu
162 Gly 110 360 163 355 164 Gly Ala Lys Asp Trp Ala Gly Gly Phe Leu Asp Leu Lys Ala Asp Leu 375 380
164 Gly Ald 27 375 165 370 166 Gln Asp Asp Thr Phe Ile Gly Asn Glu Pro Leu Thr Pro Glu Val Arg 166 Gln Asp Asp Thr Phe Ile Gly Asn Glu Pro Leu Thr Pro Glu Val Arg 390 395
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166 GIR Hop 197 390 390 167 385 168 Ala Gly Tyr Leu Gly Tyr Thr Val Thr Trp Leu Pro Ser Arg Gln Lys 415
167 Ala Cly Tyr Leu Gly Tyr Thr Val Thr Trp Leu Flo Ser 113
405 410 410 Met Gly Arg
169 405 410 169 405 410 170 Thr Ser Leu Leu Ala Ser Gly Ala Pro Arg Tyr Gln His Met Gly Arg 430 425
170 Thr Ser Let 112 1 425 430
420 420 420 171 420 172 Val Leu Leu Phe Gln Glu Pro Gln Gly Gly Gly His Trp Ser Gln Val 445 440 440 445
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173 435 The Clarific Gly Ser Tyr Phe Gly Gly Leu
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174 GH 145 455 175 450 176 Cys Gly Val Asp Val Asp Gln Asp Gly Glu Thr Glu Leu Leu Leu Ile 480
176 Cys Gly Var 157 470 177 465 178 Gly Ala Pro Leu Phe Tyr Gly Glu Gln Arg Gly Gly Arg Val Phe Ile 490 495 490 485
178 Gly Ala Pro Leu Phe Tyr Gly Glu Gli Alg
176 Gly Ald 2485 179 485 180 Tyr Gln Arg Arg Gln Leu Gly Phe Glu Glu Val Ser Glu Leu Gln Gly 510 505
179 Tyr Gln Arg Arg Gln Leu Gly Phe Glu Glu Val Sel 510
180 Tyl Gla Hay 500 505 181 500 Fig. 505 182 Asp Pro Gly Tyr Pro Leu Gly Arg Phe Gly Glu Ala Ile Thr Ala Leu 520 525
181 Pro Cly Tyr Pro Leu Gly Arg Phe Gly Glu Ala 112 112 112
182 ASP FIG 61, 17 520 520 521 Cly Ala Pro
183 515 520 183 515 120 S20 184 Thr Asp Ile Asn Gly Asp Gly Leu Val Asp Val Ala Val Gly Ala Pro 535 540
184 Thr Asp Tie Ash Oly 1957 540
185 530 San Clar Ala Val Tyr Ile Phe Asn Gly Arg His Gly Gly
185 530 535 186 Leu Glu Glu Gln Gly Ala Val Tyr Ile Phe Asn Gly Arg His Gly Gly 560
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187 545 188 Leu Ser Pro Gln Pro Ser Gln Arg Ile Glu Gly Thr Gln Val Leu Ser 575 570 575
189 565 Gar the His Gly Val Lys Asp Leu Glu
To sha cly Ard Set lie his oil
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189 565 570 189 565 190 Gly Ile Gln Trp Phe Gly Arg Ser Ile His Gly Val Lys Asp Leu Glu 190 Gly Ile Gln Trp Phe Gly Arg Ser Ile His Gly Val Lys Asp Leu Glu 580 585 590
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191 580 192 Gly Asp Gly Leu Ala Asp Val Ala Val Gly Ala Glu Ser Gln Met Tle 192 Gly Asp Gly Leu Ala Asp Val Ala Val Gly Ala Glu Ser Gln Met Tle 193 595 600 605 194 Val Leu Ser Ser Arg Pro Val Val Asp Met Val Thr Leu Met Ser Phe 195 610 615 620 196 Ser Pro Ala Glu Ile Pro Val His Glu Val Glu Cys Ser Tyr Ser Thr 196 Ser Pro Ala Glu Ile Pro Val His Glu Val Glu Cys Ser Tyr Ser Thr 197 625 630 645 198 Ser Asn Lys Met Lys Glu Gly Val Asn Ile Thr Ile Cys Phe Gln Ile 198 Ser Asn Lys Met Lys Glu Gly Val Asn Ile Thr Ile Cys Phe Gln Ile 199 645 650 655
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191 580 192 Gly Asp Gly Leu Ala Asp Val Ala Val Gly Ala Glu Ser Gin Met Tie 600 605 193 595 600 600 605 194 Val Leu Ser Ser Arg Pro Val Val Asp Met Val Thr Leu Met Ser Phe 620 615 620 615 620 635 640 635 640 197 625 630 630 635 640 198 Ser Asp Lys Met Lys Glu Gly Val Asp Ile Thr Ile Cys Phe Gln Ile 655

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Output Set. In Com
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210 Glu Gly Thr PIO Arg Nor 745 211 740 211 The Leu Arg Pro Ser Leu His Ser Glu Thr Trp Glu Ile Pro Phe Glu 212 Ile Leu Arg Pro Ser Leu His Ser Glu Thr Trp Glu Ile Pro Phe Glu 213 Arg Leu Arg Val Ser
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755 Gua Clu Ala Asn Leu Arg Val Ser
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214 Lys Asn Cys Gly Gld Har 780 780 780 215 770 775 215 Phe Ser Pro Ala Arg Ser Arg Ala Leu Arg Leu Thr Ala Phe Ala Ser 800 795 790 790 790 795 795 790 795
215 Pho Sor Pro Ala Arg Ser Arg Ala Leu Arg 124 205 800
216 Phe Ser Pro Ala Ary 505 790 217 785 218 Leu Ser Val Glu Leu Ser Leu Ser Asn Leu Glu Glu Asp Ala Tyr Trp 815 810 805
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218 Leu Ser var 315 805 810 Ser Phe Arg Lys Val
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242 Glu Pro Pro Val Pro 1000 243 995 1000 1000 244 Ala Ala Glu Pro Cys Leu Pro Gly Ala Leu Phe Arg Cys Pro Val Val 1020 1015 1020 1010 1020
1015 1010 1015 Val Tie Gly Thr Leu Glu Leu Val
244 Ala Ala Glu PIO Cys 1015 245 1010 1015 246 Phe Arg Gln Glu Ile Leu Val Gln Val Ile Gly Thr Leu Glu Leu Val 1035 1030 1035 1036 Ser Ser Leu Ser
246 Phe Arg Gin Glu 120 1030 247 1025 248 Gly Glu Ile Glu Ala Ser Ser Met Phe Ser Leu Cys Ser Ser Leu Ser 1055 1050 1050 1050 1050
247 1023 249 Cly Glu Ile Glu Ala Ser Ser Met Phe Ser Lea 1
248 Gly Glu lie Glu Ald 249 1045 249 250 Ile Ser Phe Asn Ser Ser Lys His Phe His Leu Tyr Gly Ser Asn Ala 1060 1065 1065 1070 1060
249 The Ser Phe Asn Ser Ser Lys His Phe His Dea 11- 1070
250 THE SET THE 1060 1065
0C1 1000 7 3 55 V21 VAI TVI 014 -1
250 Ile Ser Phe Ash Ser 25 1065 251 1060 1065 252 Ser Leu Ala Gln Val Val Met Lys Val Asp Val Val Tyr Glu Lys Gln

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/945,265

DATE: 09/21/2001 TIME: 20:50:00

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\09212001\1945265.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date